STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10/564,020_
Source: _1Fwp_
Date Processed by STIC: _1/23/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):** U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _10/564,020_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics
    Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2____Invalid Line Length

The rules require that a line **not exceed** 72 characters in length. This includes white spaces.

3____Misaligned Amino
    Numbering

The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.

4____Non-ASCII

The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5____Variable Length

Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0
    "bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7____Skipped Sequences
    (OLD RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

8____Skipped Sequences
    (NEW RULES)

Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____Use of n's or Xaa's
    (NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213>
    Response

Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

11____Use of <220>

Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12____PatentIn 2.0
    "bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____Misuse of n/Xaa

"n" can **only** represent a single <u>nucleotide</u>; "Xaa" can **only** represent a single <u>amino acid</u>

AMC – Biotechnology Systems Branch – 09/09/2003

see sample Sequence Listing (attached in back) for valid format.

Suggestion! IFWP
Consult Sequence Rules

RAW SEQUENCE LISTING   DATE: 01/23/2006
PATENT APPLICATION: US/10/564,020   TIME: 15:12:21

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\01232006\J564020.raw

see pp 1-15

```
     3 <110> APPLICANT: UniverSIt. degli Studi di Roma "La Sapienza"
     4        Bozzoni, Irene
     5        Denti, Michela Alessandra
     6        Rosa, Alessandro
     8 <120> TITLE OF INVENTION: SIRNA expresSIon system
    10 <130> FILE REFERENCE: OC/PCT 82806
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/564,020
C--> 13 <141> CURRENT FILING DATE: 2006-01-09
    15 <150> PRIOR APPLICATION NUMBER: RM 03/A000335
    16 <151> PRIOR FILING DATE: 2003-07-09
    18 <160> NUMBER OF SEQ ID NOS: 29
    20 <170> SOFTWARE: PatentIn verSIon 3.1
    22 <210> SEQ ID NO: 1
    23 <211> LENGTH: 11
    24 <212> TYPE: RNA
    25 <213> ORGANISM: Artificial Sequence
W--> 27 <220> FEATURE: pre-SIRNA 3' terminus
    28 <223> OTHER INFORMATION: pre-SIRNA 3' terminus
W--> 30 <220> FEATURE: pre-SIRNA 3' terminus
    31 <221> NAME/KEY: misc_feature
    32 <222> LOCATION: (1)..(11)
    33 <223> OTHER INFORMATION: pre-SIRNA 3' terminus
    36 <400> SEQUENCE: 1
    37 guccccuauu u
    40 <210> SEQ ID NO: 2
    41 <211> LENGTH: 30
    42 <212> TYPE: DNA
    43 <213> ORGANISM: Artificial sequence
W--> 45 <220> FEATURE: linkup oligonucleotide
    46 <223> OTHER INFORMATION: linkup oligonucleotide
W--> 48 <220> FEATURE: linkup oligonucleotide
    49 <221> NAME/KEY: misc_feature
    50 <222> LOCATION: (1)..(30)
    51 <223> OTHER INFORMATION: linkup oligonucleotide
W--> 54 <220> FEATURE: linkup oligonucleotide
    55 <221> NAME/KEY: misc_feature
    56 <222> LOCATION: (1)..(30)
    57 <223> OTHER INFORMATION: linkup oligonucleotide
    60 <400> SEQUENCE: 2
    61 gatctggtac cctcgaggct agcggatccg
    64 <210> SEQ ID NO: 3
    65 <211> LENGTH: 30
    66 <212> TYPE: DNA
```

expression

see item 4 on Error Summary Sheet

Does Not Comply
Corrected Diskette Needed

delete this section, since the information appears below

give source of genetic material

Do NOT insert any response to <220>. <220> is a "header" only.

delete section
delete this - no response
delete
= allowed for <220> response <220>

Just show

30

one

<220>-<223> section

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\01232006\J564020.raw**

```
        67 <213> ORGANISM: Artificial sequence
W--> 69 <220> FEATURE: linkdown oligonucleotide                          delete
        70 <223> OTHER INFORMATION: linkdown oligonucleotide
W--> 72 <220> FEATURE: linkdown oligonucleotide
        73 <221> NAME/KEY: misc_feature
        74 <222> LOCATION: (1)..(30)
        75 <223> OTHER INFORMATION: linkdown oligonucleotide
W--> 78 <220> FEATURE: linkdown oligonucleotide        ) delete <220> response
        79 <221> NAME/KEY: misc_feature
        80 <222> LOCATION: (1)..(30)
        81 <223> OTHER INFORMATION: linkdown oligonucleotide
        84 <400> SEQUENCE: 3
        85 ctagcggatc cgctagcctc gagggtacca                          30
        88 <210> SEQ ID NO: 4
        89 <211> LENGTH: 98
        90 <212> TYPE: DNA
        91 <213> ORGANISM: Artificial sequence                    delete
W--> 93 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
        95 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini                                                             delete
W--> 97 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
        99 <221> NAME/KEY: misc_feature                           <220>
       100 <222> LOCATION: (1)..(98)                              response
       101 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini OK
       104 <400> SEQUENCE: 4
       105 gatctcatac agggcaattg gcagatcaag cgtttgtgta gcgcttgatc tgccaattgc    60
       107 cctttatccc ctgactttct ggagtttcaa aagtagac                      98
       110 <210> SEQ ID NO: 5
       111 <211> LENGTH: 98
       112 <212> TYPE: DNA                          delete this section
       113 <213> ORGANISM: Artificial sequence
W--> 115 <220> FEATURE: Homo sapiens sequence with an artificial sequence at the 3'
termi
W--> 116 ni
       117 <223> OTHER INFORMATION: Homo sapiens sequence with an artificial sequence
at the 3' termi
       118       ni                                               delete
W--> 120 <220> FEATURE: Homo sapiens sequence with an artificial sequence at the 3'    <220>
termi
W--> 121 ni                                                       response
       122 <221> NAME/KEY: misc_feature
       123 <222> LOCATION: (1)..(98)
       124 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini OK
       127 <400> SEQUENCE: 5
       128 tcgagtctac ttttgaaact ccagaaagtc aggggataaa gggcaattgg cagatcaagc    60
       130 gctacacaaa cgcttgatct gccaattgcc ctgtatga                      98
       133 <210> SEQ ID NO: 6
       134 <211> LENGTH: 98
       135 <212> TYPE: DNA                              delete
       136 <213> ORGANISM: Artificial sequence
W--> 138 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
```

delete

140 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3' termini

W--> 142 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini

delete <220> response

```
    144 <221> NAME/KEY: misc_feature
    145 <222> LOCATION: (1)..(98)
    146 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
    149 <400> SEQUENCE: 6
    150 gatctcatac agggcaattg gcagatcaag cgtttgtgta gcgcttgatc tgccaattgc      60
    152 cctttatccc ctgactttct ggagtttcaa aagtagac                             98
    155 <210> SEQ ID NO: 7
    156 <211> LENGTH: 98
    157 <212> TYPE: DNA                              delete
    158 <213> ORGANISM: Artificial sequence
W--> 160 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    162 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
W--> 164 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    166 <221> NAME/KEY: misc_feature
    167 <222> LOCATION: (1)..(98)
    168 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends
W--> 171 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini  delete
    172 <221> NAME/KEY: misc_feature
    173 <222> LOCATION: (1)..(98)
    174 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
    177 <400> SEQUENCE: 7
    178 tcgagtctac ttttgaaact ccagaaagtc aggggataaa gggcaattgg cagatcaagc      60
    180 gctacacaaa cgcttgatct gccaattgcc ctgtatga                             98
    183 <210> SEQ ID NO: 8
    184 <211> LENGTH: 84
    185 <212> TYPE: DNA                              delete
    186 <213> ORGANISM: Artificial sequence
W--> 188 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    190 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
W--> 192 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    194 <221> NAME/KEY: misc_feature
    195 <222> LOCATION: (1)..(84)
    196 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends
W--> 199 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini  delete
    200 <221> NAME/KEY: misc_feature
    201 <222> LOCATION: (1)..(84)
    202 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
    205 <400> SEQUENCE: 8
    206 gatctcgggc aattggcaga tcaagcgttt gtgtagcgct tgatctgcca attgccctta      60
    208 ctttctggag tttcaaaagt agac                                            84
    211 <210> SEQ ID NO: 9
    212 <211> LENGTH: 84
    213 <212> TYPE: DNA                              delete
    214 <213> ORGANISM: Artificial sequence
W--> 216 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    217 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
```

delete

termini

W -> 219 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
     220 <221> NAME/KEY: misc_feature
     221 <222> LOCATION: (1)..(84)

RAW SEQUENCE LISTING   DATE: 01/23/2006
PATENT APPLICATION: US/10/564,020   TIME: 15:12:21

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Output Set: **N:\CRF4\01232006\J564020.raw**

delete

222 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends
W--> 225 <220> FEATURE: ~~Homo sapiens sequence with artificial 5' and 3' termini~~   *delete*
    226 <221> NAME/KEY: misc_feature
    227 <222> LOCATION: (1)..(84)
    228 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
    231 <400> SEQUENCE: 9
    232 ctgagtctac ttttgaaact ccagaaagta agggcaattg gcagatcaag cgctacacaa   60
    234 acgcttgatc tgccaattgc ccga   84
    237 <210> SEQ ID NO: 10
    238 <211> LENGTH: 113
    239 <212> TYPE: DNA
    240 <213> ORGANISM: Artificial sequence   *delete*
W--> 242 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    244 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
W--> 246 <220> FEATURE: ~~Homo sapiens sequence with artificial 5' and 3' termini~~   *delete*
    248 <221> NAME/KEY: misc_feature
    249 <222> LOCATION: (1)..(113)
    250 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
    253 <400> SEQUENCE: 10
    254 gatctcgggc aattggcaga tcaagcgttt gacttcgcat gaatgagttc attcatgaag   60
    256 cgaaacgctt gatctgccaa ttgcccttac tttctggagt ttcaaaagta gag   113
    259 <210> SEQ ID NO: 11
    260 <211> LENGTH: 113
    261 <212> TYPE: DNA   *delete*
    262 <213> ORGANISM: Artificial sequence
W--> 264 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    265 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
W--> 267 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' termini
    268 <221> NAME/KEY: misc_feature
    269 <222> LOCATION: (1)..(113)
    270 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends
W--> 273 <220> FEATURE: ~~Homo sapiens sequence with artificial 5' and 3' termini~~   *delete*
    274 <221> NAME/KEY: misc_feature
    275 <222> LOCATION: (1)..(113)
    276 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
termini
    279 <400> SEQUENCE: 11
    280 ctagctctac ttttgaaact ccagaaagta agggcaattg gcagatcaag cgtttcgctt   60
    282 catgaatgaa ctcattcatg cgaagtcaaa cgcttgatct gccaattgcc cga   113
    285 <210> SEQ ID NO: 12
    286 <211> LENGTH: 84
    287 <212> TYPE: DNA
    288 <213> ORGANISM: Artificial Sequence   *delete*
W--> 290 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' ends
W--> 291 mutated reSIdue in poSITion 16, 17 and 47,48
    292 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends

delete

293 ~~mutated reSIdue in poSItion 16, 17 and 47,48~~

W--> 295 <220> FEATURE: ~~Homo sapiens sequence with artificial 5' and 3' ends~~

W--> 296 ~~mutated reSIdue in poSItion 16, 17 and 47,~~48   *delete <2206*

response

297 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/564,020

DATE: 01/23/2006
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Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\01232006\J564020.raw**

```
      298 <222> LOCATION: (1)..(84)
      299 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends                        residue    positions
      300      mutated reSIdue in poSItion 16, 17 and 47,48
      303 <400> SEQUENCE: 12
      304 gatctcgggc aattgcgaga tcaagcgttt gtgtagcgct tgatctcgca attgcccta      60
      306 ctttctggag tttcaaaagt agac                                            84
      309 <210> SEQ ID NO: 13
      310 <211> LENGTH: 84
      311 <212> TYPE: DNA                                                  delete
      312 <213> ORGANISM: Artificial Sequence
W--> 314 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' ends
W--> 315 Mutated reSIdues 41,42 and 72,73
      316 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends
      317       Mutated reSIdues 41,42 and 72,73
W--> 319 <220> FEATURE: Homo sapiens sequence with artificial 5' and 3' ends  delete
W--> 320 Mutated reSIdues 41,42 and 72,73                                 <220>
      321 <221> NAME/KEY: misc_feature                                     response
      322 <222> LOCATION: (1)..(84)
      323 <223> OTHER INFORMATION: Homo sapiens sequence with artificial 5' and 3'
ends                         residues
      324      Mutated reSIdues 41,42 and 72,73
      327 <400> SEQUENCE: 13
      328 ctgagtctac ttttgaaact ccagaaagta agggcaattg cgagatcaag cgctacacaa      60
      330 acgcttgatc tcgcaattgc ccga                                            84
      333 <210> SEQ ID NO: 14
      334 <211> LENGTH: 20
      335 <212> TYPE: DNA
      336 <213> ORGANISM: Artificial Sequence
W--> 338 <220> FEATURE: human probe                              delete
      339 <223> OTHER INFORMATION: human probe
W--> 341 <220> FEATURE: human probe                       delete <220> response
      342 <221> NAME/KEY: misc_feature
      343 <222> LOCATION: (1)..(20)
      344 <223> OTHER INFORMATION: human probe
      347 <400> SEQUENCE: 14
      348 ggcaattggc agatcaagcg                                         20
      351 <210> SEQ ID NO: 15                     This needs an
      352 <211> LENGTH: 20                        explanation in <220>-<223>
      353 <212> TYPE: DNA                                        section.
      354 <213> ORGANISM: Artificial Sequence                    What is
W--> 356 <220> FEATURE: mutated probe in poSItion 9,10    delete   the
      357 <223> OTHER INFORMATION: mutated probe in poSItion 9,10      source of
W--> 359 <220> FEATURE: mutated probe in poSItion 9,10             genetic
      360 <221> NAME/KEY: misc_feature                              material?
      361 <222> LOCATION: (1)..(20)
      362 <223> OTHER INFORMATION: mutated probe in poSItion 9,10
      365 <400> SEQUENCE: 15
      366 ggcaattgcg agatcaagcg                    keep this. However,     20
      369 <210> SEQ ID NO: 16                          it doesn't
      370 <211> LENGTH: 20                          explain
```

Please correct remaining sequences, using these pages as examples.

<220> Artificial Sequence

SEQUENCE LISTING

<110> UniverSIt. degli Studi di Roma "La Sapienza"
        Bozzoni, Irene
        Denti, Michela Alessandra
        Rosa, Alessandro

<120> SIRNA expresSIon system

<130> OC/PCT 82806

<1507 <140> PCT/IT2004/000381
<1517 <141> 2004-07-09

There are prior data ↓

Consult
this

```
<110>        Smith, John;  Smithgene Inc.

<120>        Example of a Sequence Listing

<130>        01-00001

<140>        PCT/EP98/00001
<141>        1998-12-31

<150>        US 08/999,999
<151>        1997-10-15

<160>        4

<170>        PatentIn version 2.0

<210>        1
<211>        389
<212>        DNA
<213>        Paramecium sp.

<220>
<221>        CDS
<222>        (279)...(389)

<300>
<301>        Doe, Richard
<302>        Isolation and Characterization of a Gene Encoding a
             Protease from Paramecium sp.
<303>        Journal of Genes
<304>        1
<305>        4
<306>        1-7
<307>        1988-06-31
<308>        123456
<309>        1988-06-31

<400>        1
agctgtagtc   attcctgtgt   cctcttctct   ctgggcttct   caccctgcta   atcagatctc         60

agggagagtg   tcttgaccct   cctctgcctt   tgcagcttca   caggcaggca   ggcaggcagc        120

tgatgtggca   attgctggca   gtgccacagg   cttttcagcc   aggcttaggg   tgggttccgc        180

cgcggcgcgg   cggcccctct   cgcgctcctc   tcgcgcctct   ctctcgctct   cctctcgctc        240
```

```
ggacctgatt   aggtgagcag   gaggaggggg   cagttagc        atg  gtt  tca  atg  ttc  agc  296
                                                        Met  Val  Ser  Met  Phe  Ser
                                                         1                    5
```

```
ttg  tct  ttc  aaa  tgg  cct  gga  ttt  tgt  ttg  ttt  gtt  tgt  ttg  ttc  caa  344
Leu  Ser  Phe  Lys  Trp  Pro  Gly  Phe  Cys  Leu  Phe  Val  Cys  Leu  Phe  Gln
               10                   15                     20
```

```
tgt  ccc  aaa  gtc  ctc  ccc  tgt  cac  tca  tca  ctg  cag  ccg  aat  ctt       389
Cys  Pro  Lys  Val  Leu  Pro  Cys  His  Ser  Ser  Leu  Gln  Pro  Asn  Leu
          25                   30                          35
```

```
<210>        2
<211>        37
<212>        PRT
<213>        Paramecium sp.


<400>        2
Met  Val  Ser  Met  Phe  Ser  Leu  Ser  Phe  Lys  Trp  Pro  Gly  Phe  Cys  Leu
 1                  5                   10                     15


Phe  Val  Cys  Leu  Phe  Gln  Cys  Pro  Lys  Val  Leu  Pro  Cys  His  Ser  Ser
               20                   25                     30


Leu  Gln  Pro  Asn  Leu
          35


<210>        3
<211>        11
<212>        PRT
<213>        Artificial Sequence


<220>
<223>        Designed peptide based on size and polarity to act as a
             linker between the alpha and beta chains of Protein XYZ.

<400>        3
Met  Val  Asn  Leu  Glu  Pro  Met  His  Thr  Glu  Ile
 1                  5                   10


<210>        4
<400>        4
000
```

12

identifiers and their accompanying information as shown in the following table. The numeric identifier shall be used only in the "Sequence Listing." The order and presentation of the items of information in the "Sequence Listing" shall conform to the arrangement given below. Each item of information shall begin on a new line and shall begin with the numeric identifier enclosed in angle brackets as shown. The submission of those items of information designated with an "M" is mandatory. The submission of those items of information designated with an "O" is optional. Numeric identifiers <110> through <170> shall only be set forth at the beginning of the "Sequence Listing." The following table illustrates the numeric identifiers.

Numeric Identifier	Definition	Comments and Format	Mandatory (M) or Optional (O)
<110>	Applicant	Preferably max. of 10 names; one name per line; preferable format: Surname, Other Names and/or Initials	M
<120>	Title of Invention		M
<130>	File Reference	Personal file reference	M when filed prior to assignment of appl. number
<140>	Current Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if available
<141>	Current Filing Date	Specify as: yyyy-mm-dd	M, if available
<150>	Prior Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if applicable include priority documents under 35 USC 119 and 120
<151>	Prior Application Filing Date	Specify as: yyyy-mm-dd	M, if applicable
<160>	Number of SEQ ID NOs	Count includes total number of SEQ ID NOs	M
<170>	Software	Name of software used to create the Sequence Listing	O
<210>	SEQ ID NO:#:	Response shall be an integer representing the SEQ ID NO shown	M
<211>	Length	Respond with an integer expressing the number of bases or amino acid residues	M

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<212>	Type	Whether presented sequence mole-cule is DNA, RNA, or PRT (protein). If a nucleotide sequence con-tains both DNA and RNA frag-ments, the type shall be "DNA." In ad-dition, the combined DNA/ RNA molecule shall be further described in the <220> to <223> feature section.	M
<213>	Organism	Scientific name, i.e. Genus/species, Unknown or Artifi-cial Sequence. In addition, the "Unknown" or "Artificial Se-quence" organisms shall be further described in the <220> to <223> feature section.	M
<220>	Feature	Leave blank after <220>. <221-223> provide for a description of points of bio-logical signi-ficance in the sequence.	M, under the following condi-tions: if "n," "Xaa," or a mod-ified or unusual L-amino acid or modified base was used in a se-quence; if ORGAN-ISM is "Artifi-cial Sequence" or "Unknown"; if molecule is combined DNA/RNA.
<221>	Name/Key	Provide appropriate identifier for feature, pre-ferably from WIPO Standard ST.25 (1998), Appendix 2, Tables 5 and 6	M, under the fol-lowing conditions: if "n," "Xaa," or a modified or un-usual L-amino acid or modified base was used in a sequence
<222>	Location	Specify location within sequence; where appropriate state number of first and last bases/amino acids	M, under the fol-lowing conditions: if "n," "Xaa," or a modified or un-usual L-amino acid or modified

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		in feature	base was used in a sequence
<223>	Other Information	Other relevant information; four lines maximum	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA.
<300>	Publication Information	Leave blank after <300>	O
<301>	Authors	Preferably max of ten named authors of publication; specify one name per line; preferable format: Surname, Other Names and/or Initials	O
<302>	Title		O
<303>	Journal		O
<304>	Volume		O
<305>	Issue		O
<306>	Pages		O
<307>	Date	Journal date on which data published; specify as yyyy-mm-dd, MMM-yyyy or Season-yyyy	O
<308>	Database Accession Number	Accession number assigned by database including database name	O
<309>	Database Entry Date	Date of entry in database; specify as yyyy-mm-dd or MMM-yyyy	O
<310>	Patent Document Number	Document number; for patent-type citations only. Specify as, for example, US 07/999,999	O

<311>	Patent Filing Date	Document filing date, for patent-type citations only; specify as yyyy-mm-dd	O
<312>	Publication Date	Document publication date, for patent-type citations only; specify as yyyy-mm-dd	O
<313>	Relevant Residues	FROM (position) TO (position)	O
<400>	Sequence	SEQ ID NO should follow the numeric identifier and should appear on the line preceding the actual sequence	M

5. Section 1.824 is revised to read as follows:

1.824 Form and format for nucleotide and/or amino acid sequence submissions in computer readable form.

(a) The computer readable form required by   1.821(e) shall meet the following specifications:

(1) The computer readable form shall contain a single "Sequence Listing" as either a diskette, series of diskettes, or other permissible media outlined in paragraph (c) of this section.

(2) The "Sequence Listing" in paragraph (a) (1) of this section shall be submitted in American Standard Code for Information Interchange (ASCII) text. No other formats shall be allowed.

(3) The computer readable form may be created by any means, such as word processors, nucleotide/amino acid sequence editors or other custom computer programs; however, it shall conform to all specifications detailed in this section.

(4) File compression is acceptable when using diskette media, so long as the compressed file is in a self-extracting format that will decompress on one of the systems described in paragraph (b) of this section.

(5) Page numbering shall not appear within the computer readable form version of the "Sequence Listing" file.

(6) All computer readable forms shall have a label permanently affixed thereto on which has been hand-printed or typed: the name of the applicant, the title of the invention, the date on which the data were recorded on the computer readable form, the operating system used, a reference number, and an application serial number and filing date, if known.

(b) Computer readable form submissions must meet these format requirements:

(1) Computer: IBM PC/XT/AT, or compatibles, or Apple Macintosh;

(2) Operating System: MS-DOS, Unix or Macintosh;

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\01232006\J564020.raw**

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Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
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Input Set : **A:\PTO.RJ.txt**
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